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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.           | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------------|------------------|
| 09/539,206   | 03/30/2000  | Hirokuni Fujiyama    | YAMAP0705US                   | 8810             |
| 7590 02/07/2005<br>Renner Otto Boisselle & Sklar PLL<br>Neil A DuChes<br>1621 Euclid Avenue<br>19th Floor<br>Cleveland, OH 44115 |             |                      | EXAMINER<br>FIGUEROA, NATALIA |                  |
|  |             |                      | ART UNIT<br>2651              | PAPER NUMBER     |

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |  |                     |  |
|------------------------------|------------------------|--|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> |  | <b>Applicant(s)</b> |  |
|                              | 09/539,206             |  | FUJIYAMA ET AL.     |  |
|                              | <b>Examiner</b>        |  | <b>Art Unit</b>     |  |
|                              | Natalia Figueroa       |  | 2651                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2004 (Response).
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>06/18/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on June 18, 2004 (06/18/2004) is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Specification***

2. The title is objected to because of the following informalities: A new title is suggested; one that is clearly indicative of the invention to which the claims are directed. The examiner suggests, "Write compensation circuit of recording device". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Johnson et al (USPN 5,101,117), hereinafter Johnson.

RE claim 1, Johnson discloses a write compensation circuit of a recording device comprising a first delay portion driven by a first driving voltage, for receiving a clock signal (col. 2, lines 32-33), delaying the clock signal by a first delay time (col. 1, lines 64-66 and col. 2, lines 32-34, Fig. 1, 12), and outputting the delayed clock signal (col. 2, lines 32-34); and a voltage supplying portion for supplying the first driving voltage to the first delay portion in such a

Art Unit: 2651

manner that the first delay time is substantially equal to a clock period of the clock signal (col. 2, lines 65-68 and col. 3, lines 18-19).

***Allowable Subject Matter***

5. Claims 2-3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

Re claim 2, the prior art of record, and in particular Douglas et al (USPN 6,304,406), fails to teach or suggest the voltage supplying portion comprising a determining portion for determining whether the second delay time is within a predetermined range and a voltage select portion for selecting, according to a result of determination of the determining portion, the first driving voltage supplied to the first delay portion and selecting the second driving voltage supplied to the second delay portion.

***Response to Arguments***

7. Applicant's arguments see pages 2-4, filed September 17, 2004, with respect to claim 1 have been fully considered and are not persuasive.

Applicant's argument states "Johnson et al does not teach or suggest a voltage supplying portion which supplies the first driving voltage..." Applicant's argument is not persuasive because Johnson does provide a clock signal that is delayed by an adjustable interval through a voltage-controlled delay line. Given the signal is delayed it would be obvious to conclude that as the interval is adjusted so is the period of the signal at different times.

Applicant also argues "This is far short of a clock period (i.e., 60 ns) as required in claim 1 of the present application." Applicant's argument is not persuasive since it is not drawn to the claimed subject matter.

### *Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following documents are cited to further show the state of the art with respect to write compensation circuits.

- a) Yamamoto et al (USPN 6,424,184): Discloses voltage controlled delay circuits.
- b) Hein (USPN 5,986,830): Discloses a write precompensation circuit.
- c) Donnelly et al (USPN 6,125,157): Discloses a clock delay adjustment method.
- d) Lofgren et al (USPN 4,922,141): Discloses a delay line.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2651

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalia Figueroa whose telephone number is (703) 305-1260. The examiner can normally be reached on Monday - Thursday 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
NFM

  
DAVID HUDSPETH  
SUPERVISORY PATENT EXAMINER  
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